

ACE
ATARI
COMPUTER
ENTHUSIASTS

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SEPTEMBER, 1986

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BBS DATABASE BY J. OCKERS
OUR FIRST ST PROGRAM
FOR THE NEWSLETTER

News and Reviews

by Mike Dunn, Co-Editor

Hope you like our New Look. With this new larger format and bulk mail, we can bring you much more. We welcome contributions from our readers — programs, articles, hints, reviews or whatever you like. This article is being written early, since I will be gone in August. With Bulk Mail, we cannot write renewal notices on the label, so look at the label. You will notice a code after your name — it is the date you paid; e.g. 8P5 means you joined in Aug, 1985 and you are due to renew.]Anyone 9P5 or less is due or past due, so please renew — no other notices will be sent. Thanks.]

We receive newsletters from most of the other Atari groups, and many are having great difficulties with 8-bit vs 16-bit factions, to the point that some groups are breaking up and having heated exchanges. This has not been a problem here, either in the newsletter or in the local meetings. I have not heard a word of discontent from either side. We will continue to support both, and expand the number of pages as needed and as we can afford for the two groups. If the price of the 16-bits becomes so low that Atari drops the 8-bit line, our club will become even more valuable to our members, because of the increasingly fine public domain programs coming out in the 8-bit line. One of the best user group newsletters still is the Osborne FOG groups, and the Osborne has not been made in quite a while.

Speaking of new public domain software for the 8-bit, the Dutch Atari group has developed and released the new turboBASIC for XE/XL Ataris. According to reports from the Western NY Atari Group, this very powerful, structured BASIC is 3-6 times faster and smaller than Atari BASIC since it uses the "extra" memory, and has many advanced features. We hope to get it and some articles in the near future. One of our active local members, who has just opened an Atari store, is Dutch, speaks it fluently, and will be visiting Holland this month. He will try to contact the Dutch group and obtain what he can. More later; you will be impressed!

We recently have received many of the ST books from Abacus (POB 7219, Grand Rapids, MI 49510). As mentioned in the past, the ST was released in Germany before the USA, and these are translations of the German books. I have looked through the ones I have, and will give some impressions — many are based on the information which comes in the \$300 Atari development package, but are much cheaper, and not quite as complete. The books are usually \$20 each, and many more are under way.

Book 2: Atari ST Internals. Covers the 68000, the Glue, floppy disk controller, and all the other special chips. Did you know that the parallel printer port is controlled by the sound chip? All the various ports, pinouts, and program information is provided, as well as an overview of many of the other books in the series. If you only want to buy one, this is probably the one to get. The rest of the book covers the GEM DOS, it's functions and calls, and the complete listing of the original BIOS — almost 200 of the 446 pages of the book..

Book 3: Atari ST GEM programmer's Reference. 414 pages of GEM information; it covers most but not all of the GEM functions and calls, but to get more will cost you \$300.

Book 4: Atari ST Machine Language. A good, simple introduction to 68000 assembly language for the ST. More for beginners, I understand, than for established machine language "gurus." Readable and easy; I liked it, but some might find it too easy and not comprehensive enough. A good first step on the long road to fluency in speaking 68000.

Book 5: Atari ST Tricks and Tips. My favorite. 260 pages of neat hints, such as many utilities written in machine language with a BASIC loader equivalent. Includes RAMDISKS, a printer spooler, screen dumps for plotters and color printers, etc. There are also programs in "C".

Book 6: Atari ST Graphics and Sound. Graphics, pictures, 2 and 3 dimensional pictures; advice and hints, programs in LOGO, BASIC and Modula-2. Fractal programs and lots of info on using the sound chip.

Book 9: Atari ST BASIC training guide. A nice introduction to programming in ST BASIC, but since it is likely Atari may change to a better but not necessarily compatible BASIC, this may not be too useful in the long run. Only \$17.

Just released by Abacus is a new book on ST MIDI programming and several new ST programs at \$50 each: ST TextPro, ST FilePro, and ST PaintPro. Look for reviews in future issues of ACE.

Thunder! is out. (Batteries Included, 30 Mural St., Richmond Hill, Ontario, Canada L4B 1B5). This is the fabulous real time spelling checker which does just about everything for only \$40. Similar to the TurboLightning type memory resident spelling checker, it includes a 50,000 word dictionary, and can be used to correct your spelling as you type. It is supposed to work with any ST GEM based program in the memory mode or any file in the stand-alone mode. If in the Interactive mode, and you misspell a word or a word not in the dictionary, a bell goes off and a window opens, giving suggested replacements. You can pick one of the suggested words, add it to the dictionary or ignore it. There is also a "test" mode, allowing you to try a word, and it gives more suggestions. If you find the one you want, you can again pick it with the mouse, and it goes into your text. Strangely, if you spell the word correctly in the "test" mode, it does not seem possible to put it into the text — the program seems to only reward incorrect guesses. There is also the ability to use special abbreviations and expand them to what you want them to mean.

There is also a "stand-alone" spelling checker to will check a file, even if it is a non-GEM one. It also flags words, gives various alternatives to be selected with the mouse or ignored, and has a test mode allowing you to pick correctly spelled words. There is an option file to customize to your needs, and when you are finished, you may display the statistics of your efforts: the number of characters, words, syllables, etc., as well as a Gunning's Fog index and a Flesch's Index for difficulty of text.

It is difficult to describe how nice and easy all of the above is done. It does everything very quickly, but does flag all words with apostrophes, annoying trait found in other spelling checkers. I have used many spelling checkers on Atari, CP/M and MSDOS computers, and like this one the best. I might like it even better if I can figure out how to transfer a correct "guess" in the Test mode to the text. (This article was not written on an Atari, so Thunder! was not used.) It looks like Batteries Included has an other winner.

Atari has signed an agreement with MicroSoft to bring out an ST version of the well known **Microsoft Word** word processor. It will be called Write, and is similar to the MacIntosh Word. I hear David Small's Mac-ST cartridge is now available for \$100, and you need to buy the MAC ROM chips from Apple for \$200. Also, a software program will be available allowing the ST to read MAC disks. If any of you have any info, please let us know.

Has anyone hooked up non-Atari RGB Monitors or generic Hard disks to their ST? Please let us know anything of this sort you have done.

BBS.DAT

One of the best advantages of having a modem is you are able to call hundreds of free bulletin board systems around the world for the price of a phone call. Many of these BBS's are password-protected. Usually a person who logs onto a new BBS simply scribbles down the number and his password on a piece of scrap paper. Eventually, he will end up with a big mess pile of scrap paper with a few numbers written down. What is needed is a BBS database to keep track of the numbers and names of the BBS's plus leaving space for the user to write down his password and other info. This program keeps track of names, numbers, baud rates, and computer types. It also has the feature of search and display (or print) so you can find certain BBS's in certain area codes, computer types, baud rates, etc.

The program is menu-driven and therefore self-explanatory. Three things to note about the program:

1
When printing make sure your printer can handle 132 columns per line;

2
Turn off the Buf-Graphics feature before loading and running;

3
ALWAYS end with the quit option. When you use this option it saves all updated data.

This program is in the public domain and free to distribute and modify. If you have any questions or comments about the program you can reach me at my BBS at 815-838-3615

— Jim Ockers

STuff

The August, 1986 issue of Insoft disk magazine contains new installments in their C tutorials, as well as a file compare utility and other C source listings. The issue also contains further developments of their 3D drawing program. There is some news and reviews and an editorial. Their biggest file on the disk is the ST Net listing of discount software and hardware.

Issue #2 of the F.A.S.T.E.R. newsletter (Montreal) contains 2 very good drawings (walk in space, space shuttle), news, editorial, and a screen save disk accessory. This is the magazine which has a GEM-based program for accessing all parts of the magazine with the mouse. The newsletter program has been improved for this issue. They are getting a good response, so it looks like this magazine will really take off.

Our ST Group meetings are every 4th Wednesday of each month (we've been meeting regularly since December, 1985) at 7.00 pm. The location is Amazon Community Center, in the south crafts room.

QuickView Systems informs us **Zoomracks II** is now going to beta sites. It will be \$150 (upgrade for \$50 until September 15, then its \$80). This version makes improvements in the following areas: menus, general help and command help, rack loading, disk backup, screen display, and macros. Additional functions include a 4-function calculator and the ability to total racks & fields as well as to load and store the calculator results in fields. There is also mail merge and report formatting, importing and exporting data, Zoom to a Degas picture, paste field & card while editing, multiline search, search while editing, and an assortment of new commands. Once it's ready for market, we'll probably have a real review for you.

Atari and Microsoft have signed an agreement giving Atari the right to distribute a version of Microsoft Word for the ST computers. Dataquest (an independent market research company) predicts Atari will sell 150,000 ST computers in the States and 316,000 in the rest of the world

ESSEX

Essex (Synapse) is a hard bound 100 page book and single ST disk. Synapse with this entry is the only real competition to Infocom in the text adventure series.

Essex is a science fiction galactic adventure game. It has a dandy text parser which in my estimation is one of the best I have seen. I find my text understood — at least in part — most of the time which considerably adds to the game's playability.

On the ST this version is a great improvement over the tedious disk switching necessary on the 8-bit version with the long waits for I/O exchange. With the increased speed in the 16 bit version, the continuity of the program is enhanced and I find myself less distracted by "disk mechanics".

I will confess I did not entirely finish this adventure, but I did enjoy it once I got going and figured out what I was supposed to do. The descriptions throughout the game are unusually rich and well written although, as a rule, I have never been a fan of text-only adventures.

I think this game should be real competition to the Infocom series and I certainly recommend it to anyone who enjoys good text adventures

— Graham Smith

BBS NEWS

The BBS continues to expand. By the time you read this, we will have over 500 files available for downloading, over half of them are for the ST. We are looking into getting a second hard disk so we can expand even further. When you call the BBS you should be set for full duplex, no parity, 1 stop bit, and 8 bit words. If you are an ACE member, be sure to apply for a password so you can have full access. To get a password, leave a message to the SYSOP giving your full name, phone number, and a 4 letter password. Leaving out any of those items will make it impossible to get a password. ACE members only are allowed on Saturday, so if you have an ACE level password, this is a good time to call. Be sure to look at message base number 4. This contains a description of all new files placed on the BBS. We are online 24 hours a day, at 300, 1200, 2400 baud. Phone: (503)343-4352

MECH-BRIGADE

MECH-BRIGADE (SSI, \$60), by Gary Grigsby, is a simulation of modern armored warfare in the 20th century. It is based on a variety of combat situations between Soviet and Nato forces in Europe. You may choose between one of four scenarios or build your own scenario. All four of the included scenarios are hard enough. Any person who wishes a challenge need only try to lead the Nato forces to victory in either the Fulda or Wurzburg scenarios.

But if this is not enough you have complete control to build any situation you wish. You control whether to have rivers, the terrain density, one of five battle types (Nato pursuit, Nato assault, Meeting engagement, Soviet assault, Soviet pursuit), battle size (Large or Small), and determine for the Nato player the nationality of the Nato force (U.S., West German, Great Britain, France). At the beginning of each new scenario the player is given the option of arranging his own units on the board. Your units range from infantry company, complete with LAWs, to helicopters and Sams, with over 70 different types of weapons available.

All operations of the game are done through the use of the Keyboard and two menus, the map display menu and the unit order menu. The game action is played in turns of four pulses, with line of sight rules and hidden movement. The game mechanics are similar to **Kampfgruppe**, also by Gary Grigsby, and just as easy to learn and enjoy. Gary Grigsby has put out another challenging game for one or two players.

Play alternates between the player and the computer or another player. Each side may give its units movement or fire orders. The units will carry out their orders until they reach their objectives or they have eliminated their targets. If no fire orders are given the units are assigned fire orders by the computer. Each side must also deal with the problem of command control as well as maintaining a combined arms tactic. It is as important to place your infantry for the ambush as well as being able to lead your tanks in the counter attack.

One of the most important keys in the game is to learn just what your different weapons are capable of. With 70 different weapons available this is not as easy as it sounds, a slight difference in range can spell defeat or victory.

If the game is any indication of the actual battlefield conditions any commander is in for a hard time of it. I continually found it frustrating to see my missiles bounce off of the armor, and the general numerical superiority of the Soviet forces. Each battle is a new challenge as you must make the maximum use of your tactical skills, to outflank and stop your opponent. As with **Kampfgruppe** the real challenge of the gaming system will come in playing a live opponent where anything can happen. Any serious gamer should try this game to get a glimpse of the battle field of tomorrow

— Nick Chrones

vp's rambings

Just when I thought the end of the 8 bit era was upon us Atari turns around and has brought out an 80 column card for the 8 bit machines and they should be releasing a new disk drive (3-1/2 inch) any time now. The rumor mill is rife with things that Atari is going to do and while we expect new things for the ST we were not expecting things for the smaller machines. I hope that this means Atari will be supporting the 8 bits more then they have in the past year.

In another part of the news letter you will find the coupon I talked about last month, please fill it out and send it to us so that we can get a better idea of what you want and also please indicate just when you received the newsletter so we can figure out how long it took for you to get it using our new bulk mailing system. Thanks for your help in this matter.

— Larry Gold

FLASH

For many Atari ST owners, entering the communications world is like embarking on an adventure with Indiana Jones. The treasures are out there — free software, news and stock quotes, discount shopping services — but the road to them is lined with potential adversaries. Like curses inscribed on the walls of a long-forgotten temple, awkward commands, control codes, and file transfer protocols lie in wait, ready to impede your progress. Some people bravely sling modems over their shoulders and forge ahead to capture the largess of information services and bulletin board systems. Others, however, retreat to the sanctuary of familiar disk libraries, convinced that communications is esoterica confined to computer experts.

Fortunately there are encouraging signs that computer communications programs are becoming more communicative. The recently released program **FLASH** (\$40, Antic) can help you tame the tangle of commands leading to on-line treasures.

Notice I said "help". As long as bulletin board systems and information services like CompuServe require typed commands, telecomputing will never be as easy as using programs like 1st_Word or DEGAS. Still, **Flash**'s ability to store lists of commands in "autopilot" documents enables you to dial a number, establish a connection, log on automatically and move to a desired section of the information service with a single command. **Flash** can even sign on while you slumber, sending or retrieving electronic mail or software when rates are low.

Besides making communications accessible to beginners, **Flash** provides advanced communications capabilities for experts. People who use computers in corporations or universities can use **Flash** to emulate popular terminals such as Digital Equipment Corporation's VT-52 and VT-100.

Flash from Antic Software and Chiazz-Page Systems provides a sophisticated autopilot command language (FCL, which contains over 60 commands) and good macro ability. The terse nature of commands in FCL makes autopilot sequences difficult to program, but no more so than PC/Intercomm. Although it is bothersome to type every command and refer to the manual for the ones you have forgotten, **Flash** also includes a built-in text editor/capture buffer for creating autopilot sequences in FCL as well as an on-line help screen.

For file transfers, **Flash** works with the Xmodem and Ascii protocols. The Xmodem transfers can be done with 8-bit or 7-bit words, with Cyclical Redundancy Check (CRC) or Checksum (CHK), with 128 byte blocks or 1024 byte blocks, to provide enormous flexibility. Ascii file transfers also provide a wide variety of options.

Where **Flash** really shines is in its ability to use the GEM interface. The text editor/capture buffer is totally mouse driven, allowing anyone to enter any command by the use of drop down menus. Typing notes to yourself, without the other system knowing what you are typing, deleting blocks, merging files, uploading all or part of the buffer is all possible from the buffer.

Flash allows you to design 20 function keys which may combine commands and text. You can also "chain" keys together. Each phone entry may have an associated autopilot DO file attached to perform various functions. Or the function keys themselves may be designed to load other DO files in order to expand your function key library far beyond what seems a 20-key limit. Sixty phone numbers may be stored per directory, and each may be dialed by name. **Flash** will even redial a busy number. Function keys can also load in alternate dialing directories. The macro and dialing capabilities of **Flash** are thus made virtually unlimited.

Flash's excellent macros and advanced autopilot command language makes the program ideal for people who frequently use complex information services such as CompuServe, The Source, Delphi, GENie, and Dow Jones News/Retrieval. The program saves time by storing in macros the numerous commands needed to navigate through those services. Be prepared to spend some time learning the programs Flash Command Language to get the most out of **Flash**.

Flash is opening the door to easier and more economical communications. Autopilots and macros save time by letting you maneuver quickly through large information services. Terminal emulation lets business units unite the ST with mainframe computers, lightening the load on data processing departments. Best of all, novices who are understandably intimidated by cryptic

commands can brush these adversaries aside and embark on a communications adventure.

Here's a feature comparison of things **Flash** will do and PC/Intercomm apparently will not: **Flash** in autopilot mode will activate a printer, adjust settings and load saved macros. Macros in **Flash** may contain only 50 characters, while PC/I permits 255. Both programs permit 20 function key definitions, but in **Flash** a function key may load in another set of key definitions. PC/I supports the Kermit protocol while **Flash** does not. But the capture buffer is limited only by memory in **Flash** while PC/I has a 64k buffer (shades of the 8-bit IBM PC limitation). **Flash** also permits one to edit text and past blocks of text to a remote computer, as well as to print selected text

— Buddy Hammerton

ATARI 1200 XL HELP

I need help with this one. I just got a couple of used 1200 XLs for some little people I know. But I don't know what special things the function keys do on this model. I have no docs or manuals for these machines. Can anyone help me? Send me photocopies? Or just tell me what's different about the way these machines work? Thanks. — Jim Bumpas

BUMPAS REVIEWS

PHANTASIE

PHANTASIE (\$40, SSI) has kept me busy like a good novel. I couldn't put it away until I had finished it. It was a lot of fun working my way up to see Zeus and gain my God Spell. This is a fantasy role-playing ported over from the Apple. But it's not JUST ported over. The program makes extensive use of the GEM interface with dialog boxes and drop-down menus. This speeds play enormously! The only time you need to use anything but the mouse is when you type in the names of your characters. You'll find this the easiest and quickest to play fantasy game you've seen. You don't even need to use pencil and paper to draw the dungeon maps. There is an option to save the dungeon map showing on the screen.

You'll find puzzles to figure out, objects to collect, monsters to kill — all the things you expect from a fantasy role-playing game. The manual suggests a mixture of characters for your party. You may have up to 6 characters in any party you take out of town. But I suggest you create many additional characters. Some you'll want to take into certain dungeons, but may want to leave them out on other missions. I know I did

There are lots of monsters and dungeons to encounter in the countryside of this imaginary continent. In the dungeons are more monsters to overcome. Towns are sprinkled about the land, but some of them you can't walk to. At least two towns you can't even see on the map. One you can see only after you get there. In the towns are inns where you can rest, regaining health and magic points for casting spells. There is also a guild in each town where your characters can go to school to learn new spells. They can also find tutors to turn experience into new levels of capability. Level 15 is the highest level one can achieve in this game. My finishing characters ranged from level 15 to level 10. Towns also have armories where items can be purchased (you sell them at the Inn!). Each town also has a bank for your gold, and a mystic who will read you your score. My score never got above 99, but a friend of mine says he finished with 124 points.

The ceremony at the end contains a notice which says your characters may now await future adventures in **Phantasie II**. I'll be waiting. I hope some of the limitations of this program are changed. For instance, I was unable to accumulate more than 65,000 units of gold in a bank account. Also, I seem to have been unable to collect more than 65,000 experience points per character during any one trip out of town, even though I estimated I had close to 200,000 experience points collected per character on at least one trip. These are probably limitations imposed by the game's original medium on the 8-bit machines.

Look for this game. If you enjoy fantasy role-playing games, this one will keep your attention for a long time

BBS DATABASE

BY JIM OCKERS

```

100 rem BBS DATABASE
110 rem by Jim Ockers
120 rem March 1986
130 rem
140 rem ++> Dimension Arrays <+
150 dim name$(500),numb$(500),hour$(500),comp$(500),baud$(500)
160 line$="_____
      "
170 rem ++> read in records <+
180 open "I",#1,"BBS.DAT"
190 input#1,name$(1),numb$(1),hour$(1),comp$(1),baud$(1)
200 while name$(records+1) <> "eof"
210 records = records + 1
220 input#1,name$(records+1),numb$(records+1),hour$(records+1),comp$(records+1),baud$(records+1)
230 wend
235 close #1
240 rem
250 rem ++> init <+
260 fullw 2:width 80
270 rem
280 rem ++> menu <+
290 print:print
300 print "[1] Add board"
310 print "[2] Delete board"
320 print "[3] Edit board"
330 print "[4] Search and display"

340 print "[5] Printer listing"
350 print "[6] Sort"
355 print "[7] Exit"
360 print
370 input "Choice";c
380 on c gosub 1000,2000,3000,4000,5000,6000,7000
390 goto 290

1000 rem ** add board **
1010 records = records + 1
1020 input "Name";name$(records)
1030 input "Number";numb$(records)
1040 input "Hours";hour$(records)
1050 input "Computer";comp$(records)
1055 input "Baud";baud$(records)
1060 return
2000 rem ** delete board **
2010 print
2020 input "Delete which board? (0=Abort) ";a
2030 if a=0 then return
2040 for i=(a+1) to records
2050 n=i-1
2060 name$(n)=name$(n+1)
2070 numb$(n)=numb$(n+1)
2080 hour$(n)=hour$(n+1)
2090 comp$(n)=comp$(n+1)

```

```

2100 baud$(n)=baud$(n+1)
2110 next:records=records-1
2120 return
3000 rem ** edit board **
3010 print
3020 input "Edit which board? (0=Abort) ";a
3030 if a= 0 then return
3040 print "Board Name: ";name$(a)
3050 input "New name? (RETURN=no change) ";a$
3060 if len(a$)>0 then name$(a)=a$
3070 print "Phone Number: ";numb$(a)
3080 input "New number? (RETURN=no change) ";a$
3090 if len(a$)>0 then numb$(a)=a$
3100 print "Hours: ";hour$(a)
3110 input "New hours? (RETURN=no change) ";a$
3120 if len(a$)>0 then hour$(a)=a$
3130 print "Computer system: ";comp$(a)
3140 input "New system? (RETURN=no change) ";a$
3150 if len(a$)>0 then comp$(a)=a$
3160 print "Baud rate: ";baud$(a)
3170 input "New baud rate? (RETURN=no change) ";a$
3180 if len(a$)>0 then baud$(a)=a$
3190 print:print
3200 input "Re-edit Entry? (Y/N) ";a$
3210 if a$="Y"or a$="y" then goto 3040
3220 return
4000 rem ** search and diplay **
4010 print:print
4020 print "[1] Display all entries ."
4025 print "[2] Display by name."
4030 print "[3] Display by area code."
4040 print "[4] Display by prefix."

4050 print "[5] Display by computer system."
4060 print "[6] Display by baud rate"
4070 print:input "choice";c
4080 if c<1 or c>6 then 4070
4090 if c=1 then gosub 9000
4100 if c=2 then gosub 10000
4120 if c=3 then gosub 11000
4130 if c=4 then gosub 12000
4140 if c=5 then gosub 13000
4150 if c=6 then gosub 14000
4999 return
5000 rem ** Printer listing **
5005 width lprint 132

```

```

5010 for i=1 to records
5020 lprint using "###. ";i;
5030 lprint tab(6);name$(i);
5040 lprint tab(27);numb$(i);
5050 lprint tab(42);hour$(i);
5060 lprint tab(55);comp$(i);
5070 lprint tab(68);baud$(i);tab(82);line$
5080 next i
5090 return
6000 rem ** sort **
6010 b=1
6020 b=2*b;if b<=records then goto 6020
6030 b=int(b/2);if b=0 then return
6040 for i=1 to records-b:c=i
6050 d=c+b;if name$(c)<name$(d) then 6120
6060 swap name$(c),name$(d)
6070 swap numb$(c),numb$(d)
6080 swap hour$(c),hour$(d)
6090 swap comp$(c),comp$(d)
6100 swap baud$(c),baud$(d)
6110 c=c-b;if c>0 then 6050
6120 next:goto 6030
7000 rem ** quit **
7010 open "O",#1,"BBS.DAT"
7020 for i = 1 to records
7030 print#1,name$(i):print#1,numb$(i)
7035 print#1,hour$(i):print#1,comp$(i):print#1,baud$(i)
7040 next i
7050 for i=1 to 5:print#1,"eof":next i
7060 close #1
7070 end
8000 rem ** display record in i **
8010 rem
8020 print using "###. ";i;
8030 print tab(6);name$(i);
8040 print tab(27);numb$(i);
8050 print tab(42);hour$(i);
8060 print tab(55);comp$(i);
8070 print tab(68);baud$(i)
8080 return
9000 rem ** display all to screen **
9010 for i=1 to records
9020 gosub 8000
9030 next i:return
10000 rem ** display to screen by name **
10010 print:input "What name";c$
10020 for i=1 to records
10030 if name$(i)=c$ then gosub 8000
10040 next i
10050 print "Sorry. No match found."

```


FINE-TUNE DOS

(reprint: June, 1986 Current Notes)

How to Delete "Twin" Files: Have you ever ended up with 2 or more files on your disk with the same filename? Do you end up cursing and screaming when you try to delete one of them, then find DOS has deleted BOTH of them? There is a way around this folks:

1. Boot up DOS with BASIC in.
2. In the immediate mode, type POKE 3118,0
3. Type DOS, and press RETURN

Now you can delete without losing both files, because by POKEing 3118,0 DOS will erase ONLY the first "twin" file. How about that?

Speed up DOS 2.0S: If your DOS 2.0S seems to write very slowly compared to other DOS's, that's 'cause it has a WRITE VERIFY built into it. You can easily create a new version of the DOS without the write verify. Most of the time you don't need it anyway — and some other DOS's give you the option of toggling it on and off. Here's what to do:

1. Boot up DOS with BASIC in
2. In the immediate mode, type POKE 1913,80
3. Type DOS and press RETURN
4. Re-write DOS and DUP to the disk using the Write DOS and DUP function on the DOS menu

You've created a new DOS with the write verify turned off. It will write much faster now. Cool?

Arrgh! Error 164 Again?!! Awww. You got an Error 164 AGAIN? Well, do you know you can still force DOS to load the program anyway? Error 164 means you have screwed up data on the disk. If you have a LOT of garbage, you'll have a big problem. But if only a little bit of the file got messed up, and you just KNOW you can fix it if you can get the file to load, never fear. Do the following:

1. Boot up DOS with BASIC in
2. In the immediate mode, type POKE 4148,234:POKE 4149,234
3. Now LOAD the program either from BASIC or from DOS. You won't get Error 164 now. And you can fix that garbled program. Ain't this just peachy?

If you Have More than 2 Drives: Some DOS's are built for systems with multiple drives. But many DOS's assume you have only 2 drives, which is a no-no if you've just bought a 3d drive and your DOS won't access it. Well, all you gotta do is the following:

1. Boot up DOS with BASIC in
2. In the immediate mode, type POKE 1802,15
3. Type DOS and press RETURN
4. Re-write DOS to the disk with the DOS menu function

Now you'll have written a new DOS which will assume you have as many as four drives. That ought to do ya!

Change Wildcard "*" to: If you like to play around with DOS and want to change your wildcard character from "*" to something else (any ATASCII character you want), it's really pretty simple. Dig out your ol' manual showing the ATASCII characters and values. You'll notice the ATASCII value for the "*" character is 42. Now pick out whatever character you want to use instead and look up its value. For example, suppose you prefer the "+" character. You'll notice the "+" character has an ATASCII value of 46. To make the change do the following:

1. Boot up DOS with BASIC in.
2. In the immediate mode, type POKE 3783,46 (or the ATASCII value of whatever character you choose)
3. Type DOS and press RETURN
4. Re-write DOS and DUP using the DOS menu function

Now your new wild and crazy wildcard character is built right in!

Make Lower Case Filenames: Yes, fans, you CAN use lower-case letters for your disk filenames. You see MYDOS doing it, right? Here's how you can do it with ANY DOS! If you look at the ATASCII codes, you'll see the value of "0" is 48, and the value of lowercase "z" is 122. Do this:

1. Boot up DOS with BASIC in
2. In the immediate mode, type POKE 3818,48:POKE 3822,123
3. Type DOS and press RETURN
4. Re-write DOS to the disk with the menu function

These POKEs are set in the parameters to accept ATASCII values in the filenames starting from 48 and ending with 122 (but the 123 you see in the POKE above is correct)

4-JOYSTICK XL/XE

(Reprint: A-Bug, June, 1986, Boston Computer Society)

When the Atari 1200XL appeared, one criticism was the new machine has only two joystick ports, rather than the four ports featured by the earlier 400 and 800 machines. This limitation is also present in all the newer Atari machines. Owners of these machines cannot play games intended for more than two players — until now!

The interface described in this article allows you to connect four joysticks to your XL or XE machine. With the software included, it is compatible with most programs intended for the earlier computers. The interface plugs into the joystick ports and requires no modification to your computer.

How the Interface Works

Lines 1 and 2 of joystick port 2 are programmed as outputs and used to select one of the four input jacks. The modified operating system outputs each of the four port addresses in turn. The data selectors in the interface connect the appropriate inputs to joystick port 1; the OS reads them from there. The stick values are put into the expected memory locations, so the interface is compatible with most software. Paddle inputs are connected directly from input ports 1 and 2 to the corresponding ports of the computer and are scanned normally

Building the Interface

The schematic diagram and suggested board layout appear in Figure 1. The terminal points shown in the diagram are connected to pins of the connector plugs and jacks as indicated. Parts list:

IC1: 74LS21
IC2-4: 74LS153
C1: 22 uf tantalum
C2-5: .1 uf monolithic ceramic
C6-32: .001 uf monolithic ceramic
R1-27: 220 ohm, 1/4 watt
J1-4: DB9P
P1-2: DB9S

The Software

The software for the interface (Listing 1) modifies the Revision B operating system found on the Translator Disk. It changes the joystick scanning code to work with the interface. It will work with either side of the Atari Translator disk, the Fix XL from Antic, or the Home-Made Translator from Analog. The Basic program creates an AUTORUN.SYS file. Put it on a disk with DOS. This is the 4-port handler disk.

If you have the Home-Made Translator, you can make a disk for use with the interface which boots in one step. Boot the HM Translator, then the handler disk. Load the Basic program which creates the HM Translator and run it

How to Use the Interface

To run programs with the 4-joystick interface, boot your Translator (with Basic enabled or disabled, as needed), then boot the 4-port handler disk. Next insert your program disk and press Select. Plug the interface into the joystick ports of your machine, and plug joysticks or other compatible controllers into the interface

Limitations

Some programs will not work with this 4-joystick interface. Possible problems:

Reading the ports directly. This is usually done only for devices other than joysticks.

Changing any of the port lines to outputs. Devices which require this include keyboard controllers (NOT the CX85 numeric keypad), MPP modems, and printer interfaces.

Devices using the paddle inputs (paddles, CX85 keypad) will only work in the first two ports.

Any software which will not run with the OS in RAM. This is usually caused by protection schemes, not any inherent problem in the program.

Cartridge software is difficult to use with the Translator. Using a cartridge backup program which converts them to disk files will let you use them with this driver.

The interface consumes about 20 ma. This should not be a problem unless you have substantial extra power supply loads on your machine.

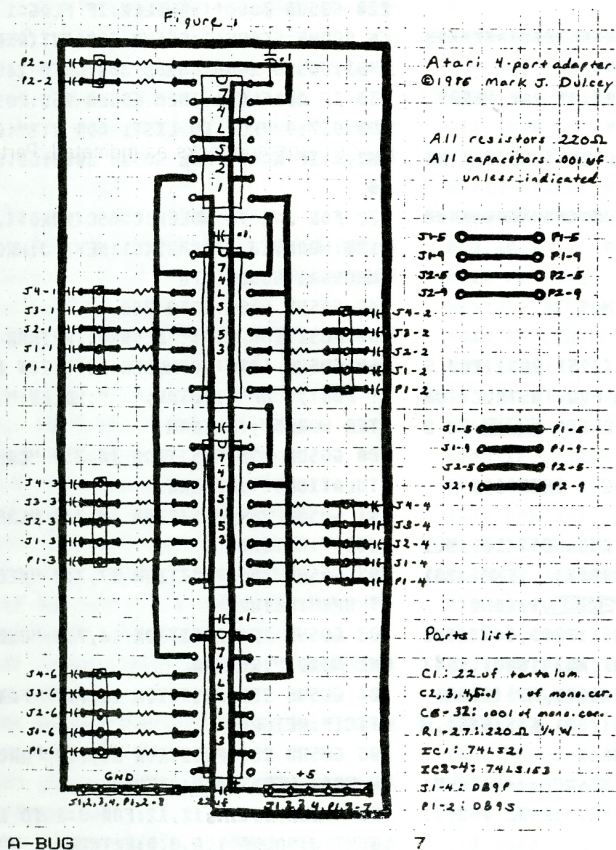
If you have a Ramrod XL or similar board, you could burn the modified Translator into an EPROM and install it. This should solve the problems with protected software and cartridges.

The one piece of software I've not been able to get to work with this interface is M.U.L.E. There are at least two versions of the program. The earlier one appears to read the ports directly; the later one will not run with the OS in RAM. If anyone can tell me how to use this interface with M.U.L.E., I will be very grateful!

— Mark J. Dulcey

LISTING 1 ©1986 MARK J. DULCEY

```
10 OPEN #1,0,"D:AUTORUN.SYS":TRAP 30
20 READ A:PUT #1,A:GOTO 20
30 CLOSE #1:END
1000 DATA 255,255,0,56,200,56,162,0,169,12,157,66
1010 DATA 3,32,86,228,162,0,169,3,157,66,3,169
1020 DATA 199,157,68,3,169,56,157,69,3,169,8,157
1030 DATA 74,3,169,0,157,75,3,32,86,228,162,0
1040 DATA 169,11,157,66,3,169,155,157,68,3,169,56
1050 DATA 157,69,3,169,44,157,72,3,169,8,157,73
1060 DATA 3,32,86,228,169,5,205,31,200,200,251,120
1070 DATA 169,0,141,14,212,141,14,210,169,40,141,227
1080 DATA 230,162,49,189,105,56,157,115,232,202,16,247
1090 DATA 76,119,228,162,3,138,10,10,10,10,141,0
1100 DATA 211,234,234,234,234,234,234,234,234,234,234
1110 DATA 173,0,211,41,15,157,120,2,173,16,200,157
1120 DATA 132,2,189,0,210,157,112,2,189,4,210,157
1130 DATA 116,2,202,16,200,125,155,70,111,117,114,45
1140 DATA 112,111,114,116,32,97,100,97,112,116,101,114
1150 DATA 32,100,114,105,118,101,114,155,155,32,32,32
1160 DATA 00,114,101,115,115,32,83,69,76,69,67,04
1170 DATA 155,69,50,226,2,227,2,0,56,224,2,225
1180 DATA 2,0,56
```



Reprint from Page 6 of England.

SONAR SEARCH Ron Smith, Cheshire

Seek...locate...destory! Sonar Search is a submarine hunt game in the classic style of seeking targets by deduction and logic. You are presented with a grid and by using the joys tick have to place a cursor in the position that you think the enemy submarine is located. You will be given a number that indicateds how far fr om the target you are and must then

deduce the exact target position. Yo u have a limited number of depth cha rges and the enemy submarine pack is hunting you as well so you may be s unk.

You may change some of the variabl es in the program to make the game e asier or more challenging as follows :

TARGETS (line 1000)-the number may be changed to make the game shorter or longer.

SUNKS (line 1000)-a higher random number or fixed number will allow yo u survive longer.

DEPC (line 1040)-gives the number of depth charges available for each target.

SINK (line 2010)-if the fraction i s higher you will survive longer or if lower you will sink easier.

RESCUE (line 2510)-the lower the f raction the better change of being r escued.

Target located...target located..

```
1 REM *****
2 REM ** SONAR SEARCH **
3 REM ** BY **
4 REM ** R.F.SMITH **
5 REM ** 1983 **
6 REM *****
10 GOSUB 7000:REM TITLE PAGE
20 GOTO 1000
30 FOR W=1 TO 150:NEXT W:RETURN
40 FOR W=1 TO 500:NEXT W:RETURN
50 FOR W=1 TO 200:NEXT W:RETURN
60 FOR W=1 TO 50:NEXT W:RETURN
70 POSITION POX,POY:RETURN
80 POSITION POX,POY+1:RETURN
90 POSITION POX,POY+2:RETURN
100 POSITION POX,POY+3:RETURN
110 FOR Z=0 TO 3:POSITION POX,POY+Z:
? #5;" "":NEXT Z:R
ETURN
120 FOR P=30 TO 200:SOUND 0,P,0,10:N
EXT P:SOUND 0,0,0,0:RETURN
200 FOR A=1 TO LEN(A$):? A$(A,A):;50
UND 0,65,10,6:SOUND 1,70,10,6:FOR B=
1 TO 20:NEXT B
210 SOUND 0,0,0,0:SOUND 1,0,0,0:NEXT
A:RETURN
999 REM MAIN ROUTINE
1000 TARGET=0:TARGETS=INT(RND(0)*10+
5):HITS=0:MISS=0:SUNKS=INT(RND(0)*9+
2):SOUND 0,0,0,0:SOUND 2,0,0,0
1005 POX=0:POY=16:GRAPHICS 17:POKE 7
12,101:POKE 700,170:POKE 709,120:POK
E 710,154:POKE 711,26
```


MAKE-A-WORD

Make-A-Word

Make-A-Word is a game where you make as many words as you can from the letters of the word/s supplied. The computer has to know of course all the words that can be made from the supply words. That means somebody (you?) has to type them all in. Fortunately Joe Collins has done this for the supply words 'MERRY CHRISTMAS', 'GEORGE WASHINGTON' AND 'ABRAHAM LINCOLN'. These are available as DATA files on disk or can be downloaded from the ACE BBS.

When you run the program, you are asked to enter the supply words if other than 'Merry Christmas'. If you have the DATA files mentioned above you can enter the appropriate words. If not, enter whatever supply words you desire and choose the option to be able to add words. You will be asked to verify each addition.

When you are finished, press BREAK or SYSTEM RESET. On a fresh line type in 'GOSUB 4000' and a data file KXXXX.DAT will be created where KXXXX represents the first 5 letters of your supply words. The data file is then available for use. You can always add to it by selecting the 'add words' option at the beginning of the program. If you create fairly complete data files, send them in to ACE to save others the trouble of creating them.

```

2 REM *****
*
3 REM **      MAKE-A-WORD      *
*
4 REM **      J. COLLINS & S. OCKERS  *
*
5 REM **      7-86              *
*
6 REM *****
*
8 REM
10 REM *****
*****
11 REM * If you wish to add new word
s to an existing *
12 REM * MAKE-A-WORD here's the proc
edure to follow. *
13 REM * When the program asks if yo
u'd like to be able *
14 REM * to add words, press the 'Y'
. When you're *

```

```

15 REM * finished using the program,
press the BREAK or *
16 REM * the SYSTEM RESET key. Then
, on a clear line, *
17 REM * type in GOSUB 4000, and the
new words will be *
18 REM * added to your DATA file. T
o create a new *
19 REM * MAKE-A-WORD, follow the sam
e procedure after *
20 REM * entering your new supply wo
rd/s at the start. *
21 REM *****
*****
22 REM
23 REM *****
*****
24 REM * DATA files exist for MERRY
CHRISTMAS, *
25 REM * ABRAHAM LINCOLN & GEORGE WA
SHINGTON *
26 REM *****
*****
27 REM
30 DATA MERRY CHRISTMAS
32 REM
50 POKE 752,1: CHR$(125):POSITION 5
,8: "PRESS SPACEBAR FOR INSTRUCTION
S":POSITION 8,10: "PRESS START TO B
EGIN"
60 GOSUB 7900:IF FLAG=1 THEN 100
70 GOSUB 7000
100 DIM SUPPLY$(20),CHOICES$(20),WLI
NES$(9),BLANK$(36),WORD$(9),TEMP$(20)
,TONES$(13):TONES$="CBAZY10[QW]<"
110 DIM G3$(1000),W3$(1000),G4$(1000)
,W4$(1000),G5$(1000),W5$(1000),G6$(
1000),W6$(1000),G7$(1000),W7$(1000)
120 DIM G8$(700),W8$(700),G9$(500),W
9$(500),SC$(396),F$(11)
180 READ SUPPLY$:ULINE$="-----":
MDLEN=5:OPEN #2,4,0,"K":POKE 752,1:
ADDFLG=0
182 BLANK$(1)="" :BLANK$(36)="" :BLA
NK$(2)=BLANK$: CHR$(125):POSITION 6
,6: "Enter supply word/s"
183 POSITION 6,7: "if other than ";
SUPPLY$:POSITION 6,8:INPUT TEMP$:IF
TEMP$="" THEN 186
184 SUPPLY$=TEMP$
186 L$UP=LEN(SUPPLY$):X$UP=INT((20-L
$UP)/2):POSITION 6,12: "Do you want
to be able":POSITION 6,13
188 ? "to add words to list (Y/N)?"
:GET #2,K:IF K=89 THEN ADDFLG=1
190 ? CHR$(125):SCORE=0:GOSUB 5000:5
C$(1)="" :SC$(396)="" :SC$(2)=SC$
192 NPOS=1:SCPOS=1:WRONG=0:POKE 83,3
7:DLST=PEEK(560)+256*PEEK(561):POKE
DLST+8,7:POKE DLST+10,6

```

```

193 FOR J=28 TO 30:POKE (DLST+J),PEE
K(DLST+J+1):NEXT J
194 G3=0:G4=0:G5=0:G6=0:G7=0:G8=0:G9
=0:GOSUB 1250:POKE 710,166:POKE 709,
0: CHR$(125)
199 REM *** MAIN LOOP ***
200 GOSUB 9000:GOSUB 250:GOSUB 260:P
OSITION 10,21: "WRONG=":WRONG:POSIT
ION 22,21: "RIGHT=":SCORE:GOSUB 10
00
210 FLAG=0:GOSUB 2000+10*MDLEN:IF FL
AG=1 THEN GOSUB 250:POSITION 13,7:
"WORD USED ALREADY!":GOSUB 350:GOTO
200
220 GOSUB 3000+10*MDLEN:IF FLAG=1 TH
EN SCORE=SCORE+1:GOSUB 300+INT(RND(0
)*6):GOSUB 2000:GOSUB 360:GOTO 240
230 IF ADDFLG=1 THEN GOSUB 250:POSIT
ION 6,7: "NOT IN LIST. ADD IT?":GET
#2,K:IF K=89 THEN GOSUB 3000:GOTO 2
40
232 FOR J=1 TO MDLEN:C=ASC(WORD$(J))
+128:WORD$(J,J)=CHR$(C):NEXT J:WRONG
=WRONG+1:GOSUB 370
240 GOSUB 6000:GOTO 200
250 POSITION 2,7: BLANK$:RETURN
260 GOSUB 1200+10*MDLEN:POSITION 8,7
: "PART;" OF ":"TOTAL;" ":"MDLEN;" LE
TTER WORDS":RETURN
300 GOSUB 250:POSITION 14,7: "CONGR
ATULATIONS!":RETURN
301 GOSUB 250:POSITION 17,7: "GREAT
JOB!":RETURN
302 GOSUB 250:POSITION 17,7: "KEEP
IT UP!":RETURN
303 GOSUB 250:POSITION 14,7: "ONE M
ORE WORD!":RETURN
304 GOSUB 250:POSITION 16,7: "FANTA
STIC!":RETURN
305 GOSUB 250:POSITION 10,7: "ANOTH
ER NOAH WEBSTER!":RETURN
350 SOUND 1,111,12,12:FOR J=1 TO 100
:NEXT J:SOUND 1,0,0,0:RETURN
360 FOR J=32 TO 24 STEP -8:SOUND 0,J
,10,10:Q=1^1^1:SOUND 0,0,0,0:NEXT J:
RETURN
370 SOUND 0,64,6,10:Q=1^1^1:SOUND 0,
0,0,0:SOUND 0,127,6,10:Q=1^1^1:SOUND
0,0,0,0:RETURN
999 REM *** GET KEY ***
1000 CHOICES$=SUPPLY$:WORD$=ULINE$(1
,MDLEN):XWORD=INT(20+(20-MDLEN)/2):L
POS=1
1010 POSITION X$UP,3: CHOICES$:POSI
TION XWORD,4: WORD$
1020 IF LPOS>MDLEN THEN RETURN
1030 GET #2,KEY:IF KEY>64 AND KEY<91
THEN GOSUB 1100
1040 IF KEY>50 AND KEY<50 THEN POSIT
ION XWORD,4: BLANK$(1,9):MDLEN=KEY-

```


S. OCKERS & J. COLLINS

```

48:GOSUB 260:GOSUB 1190:GOTO 1000
1050 IF KEY=126 AND LPOS>1 THEN GOSU
B 1150
1060 IF KEY=32 THEN 1000
1070 GOTO 1010
1099 REM *** DETERMINE IF VALID ***
1100 J=1
1110 IF ASC(CHOICES$(J))=KEY THEN CH
OICES$(J,J)=CHR$(ASC(CHOICES$(J,J))+
128):WORD$(LPOS)=CHR$(KEY):GOTO 1140

1120 J=J+1:IF J>L5UP THEN RETURN
1130 GOTO 1110
1140 LPOS=LPOS+1:GOSUB 1190:RETURN
1149 REM *** BACK UP A CHARACTER ***

1150 LPOS=LPOS-1:LASTCHR=ASC(WORD$(L
POS)):J=L5UP
1160 IF ASC(CHOICES$(J))=LASTCHR THE
N CHOICES$(J,J)=WORD$(LPOS,LPOS):WOR
D$(LPOS,LPOS)="-":RETURN
1170 J=J-1:GOTO 1160
1190 TONE=ASC(TONES$(INT(RND(0)*12+1
))):FOR J=15 TO 0 STEP -1:SOUND 1,T
ONE,10,J:NEXT J:RETURN
1229 REM *** FOR FRACTION GUESSED **
*
1230 TOTAL=M3:PART=G3:RETURN
1240 TOTAL=M4:PART=G4:RETURN
1250 TOTAL=M5:PART=G5:RETURN
1260 TOTAL=M6:PART=G6:RETURN
1270 TOTAL=M7:PART=G7:RETURN
1280 TOTAL=M8:PART=G8:RETURN
1290 TOTAL=M9:PART=G9:RETURN
1999 REM *** ADD A GUESSED WORD ***
2000 GOSUB 2000+M0LEN:RETURN
2003 G3$(LEN(G3$)+1)=WORD$:G3=LEN(G3
$)/3:RETURN
2004 G4$(LEN(G4$)+1)=WORD$:G4=LEN(G4
$)/4:RETURN
2005 G5$(LEN(G5$)+1)=WORD$:G5=LEN(G5
$)/5:RETURN
2006 G6$(LEN(G6$)+1)=WORD$:G6=LEN(G6
$)/6:RETURN
2007 G7$(LEN(G7$)+1)=WORD$:G7=LEN(G7
$)/7:RETURN
2008 G8$(LEN(G8$)+1)=WORD$:G8=LEN(G8
$)/8:RETURN
2009 G9$(LEN(G9$)+1)=WORD$:G9=LEN(G9
$)/9:RETURN
2029 REM *** HAS WORD BEEN GUESSED?
***
2030 IF LEN(G3$)=0 THEN RETURN
2032 FOR J=1 TO LEN(G3$)-2 STEP 3:IF
G3$(J,J+2)=WORD$ THEN FLAG=1
2034 NEXT J:RETURN
2040 IF LEN(G4$)=0 THEN RETURN
2042 FOR J=1 TO LEN(G4$)-3 STEP 4:IF
G4$(J,J+3)=WORD$ THEN FLAG=1
2044 NEXT J:RETURN

3062 FOR J=1 TO LEN(M8$)-7 STEP 8:IF
M8$(J,J+7)=WORD$ THEN FLAG=1
3064 NEXT J:RETURN
3090 IF LEN(M9$)=0 THEN RETURN
3092 FOR J=1 TO LEN(M9$)-8 STEP 9:IF
M9$(J,J+8)=WORD$ THEN FLAG=1
3094 NEXT J:RETURN
3996 REM *****
*
3997 REM * GOSUB 4000 TO SAVE
*
3998 REM * UPDATED VALID WORD LIST
*
3999 REM *****
*
4000 F$="D:"F$(3)=SUPPLY$(1,5):F$(8
)=".DAT":OPEN #1,8,0,F$
4010 IF LEN(M3$)=0 THEN PUT #1,155:G
OTO 4020
4012 FOR J=1 TO LEN(M3$):PUT #1,ASC(
M3$(J)):NEXT J:PUT #1,155
4020 IF LEN(M4$)=0 THEN PUT #1,155:G
OTO 4030
4022 FOR J=1 TO LEN(M4$):PUT #1,ASC(
M4$(J)):NEXT J:PUT #1,155
4030 IF LEN(M5$)=0 THEN PUT #1,155:G
OTO 4040
4032 FOR J=1 TO LEN(M5$):PUT #1,ASC(
M5$(J)):NEXT J:PUT #1,155
4040 IF LEN(M6$)=0 THEN PUT #1,155:G
OTO 4050
4042 FOR J=1 TO LEN(M6$):PUT #1,ASC(
M6$(J)):NEXT J:PUT #1,155
4050 IF LEN(M7$)=0 THEN PUT #1,155:G
OTO 4060
4052 FOR J=1 TO LEN(M7$):PUT #1,ASC(
M7$(J)):NEXT J:PUT #1,155
4060 IF LEN(M8$)=0 THEN PUT #1,155:G
OTO 4070
4062 FOR J=1 TO LEN(M8$):PUT #1,ASC(
M8$(J)):NEXT J:PUT #1,155
4070 IF LEN(M9$)=0 THEN PUT #1,155:G
OTO 4080
4072 FOR J=1 TO LEN(M9$):PUT #1,ASC(
M9$(J)):NEXT J:PUT #1,155
4080 CLOSE #1:RETURN
4994 REM *****
*
4995 REM * READ DATA FROM DISK *
*
4996 REM * FILE IS D:XXXXX.DAT *
*
4997 REM * WHERE XXXXX IS 1ST 5 *
*
4998 REM * LETTERS OF SUPPLY WORD *
*
4999 REM *****
*
5000 POSITION 14,10:? "GETTING DATA"
:POSITION 15,12:? "PLEASE WAIT":TRAP

```


MAKE-A-WORD CON'T

```

5000
5002 F$="D":F$(3)=SUPPLY$(1,5):F$(8)
)=".DAT":OPEN #1,4,0,F$:J=1
5010 GET #1,C:IF C=155 THEN J=1:M3=L
EN(M3$)/3:GOTO 5020
5012 M3$(J)=CHR$(C):J=J+1:GOTO 5010
5020 GET #1,C:IF C=155 THEN J=1:M4=L
EN(M4$)/4:GOTO 5030
5022 M4$(J)=CHR$(C):J=J+1:GOTO 5020
5030 GET #1,C:IF C=155 THEN J=1:M5=L
EN(M5$)/5:GOTO 5040
5032 M5$(J)=CHR$(C):J=J+1:GOTO 5030
5040 GET #1,C:IF C=155 THEN J=1:M6=L
EN(M6$)/6:GOTO 5050
5042 M6$(J)=CHR$(C):J=J+1:GOTO 5040
5050 GET #1,C:IF C=155 THEN J=1:M7=L
EN(M7$)/7:GOTO 5060
5052 M7$(J)=CHR$(C):J=J+1:GOTO 5050
5060 GET #1,C:IF C=155 THEN J=1:M8=L
EN(M8$)/8:GOTO 5070
5062 M8$(J)=CHR$(C):J=J+1:GOTO 5060
5070 GET #1,C:IF C=155 THEN J=1:M9=L
EN(M9$)/9:GOTO 5080
5072 M9$(J)=CHR$(C):J=J+1:GOTO 5070
5080 TRAP 40000:CLOSE #1:RETURN
5999 REM *** ROUTINE TO SCROLL WORDS
***
6000 IF SCPOS+MLEN>395 THEN SC$=SC$(
37):SC$(361)=BLANK$:SCPOS=361:NPOS=
1
6010 IF NPOS+MLEN>35 THEN SCPOS=SCP
OS+37-NPOS:NPOS=1
6020 SC$(SCPOS,SCPOS+MLEN-1)=WORD$:
SCPOS=SCPOS+MLEN+1:NPOS=NPOS+MLEN+
1
6030 POSITION 2,9:? SC$;:RETURN
7000 ? :? "K":? "IN THIS GAME, YOU M
AKE AS MANY WORDS AS YOU CAN FROM T
HE WORD OR WORDS DISPLAYED AT TH
E"
7010 POSITION 19,3:? "TOP OF YOUR SC
REEN. FOR EXAMPLE, IF THE WORDS ARE
MERRY CHRISTMAS, YOU CAN MAKE THE
WORDS"
7020 ? "CART, HEART, AND MERTT."
7030 ? :? :? "THE FOLLOWING ARE RULE
S YOU MAY WISH TO FOLLOW."
7040 ? :? :? "1.) DON'T USE PROPER N
OUNS. IN OTHER WORDS, YOU SHOULD NO
T USE ANY WORDS THAT START WITH A"
7050 POSITION 20,15:? "CAPITAL LETT
ER. SO, YOU SHOULD NOT USE THE NA
MES OF PEOPLE, CITIES, STATES, ETC
."
7060 GOSUB 7900:IF FLAG=1 THEN RETUR
N
7070 ? "2.) DON'T USE CONTRACTIONS.
YOU SHOULD NOT USE WORDS"
7080 POSITION 16,2:? "THAT HAVE AN A

```

```

POSTROPHE SUCH AS DON'T, WON'T, ISN'
T, ETC."
7090 ? :? :? "3.) DON'T USE ABBREVIAT
IONS."
7100 ? :? :? "4.) DON'T USE "NAUGHTY
" WORDS OR WORDS THAT REFER TO SEXUAL
PARTS OF THE BODY"
7110 ? :? :? "5.) LOOK AT THE WORDS
MERRY CHRISTMAS. THERE IS ONLY ONE A
AVAILABLE. YOU MAY NOT MAKE A WORD TH
AT"
7120 POSITION 23,16:? "HAS AN A IN I
T TWO TIMES. FOR EXAMPLE, YOU MAY
NOT USE THE WORD AMASS BECAUSE THE
RE"
7130 POSITION 35,18:? "ARE TWO As I
N IT, AND ONLY ONE A IS AVAILA
BLE."
7140 GOSUB 7900:IF FLAG=1 THEN RETUR
N
7150 ? "6.) DON'T USE THE PLURAL FORM
OF A WORD IF YOU CAN MAKE THE PLURAL
BY ADDING AN S. FOR EXAMPLE, DON'T
USE"
7160 POSITION 31,3:? "CARS, HAMME
RS, TARS, ETC. YOU MAY USE THE PLU
RAL OF A WORD IF YOU ADD"
7170 POSITION 30,5:? "MORE THAN AN S
. FOR EXAMPLE, YOU CAN USE ARCHESBE
CAUSE YOU HAVE TO ADD BE NOT S ONLY.
"
7180 ? :? :? "7.) WHEN YOU RUN THE P
ROGRAM, WORDS WILL BE DISPLAYED AT
THE TOP OF THE SCREEN. BELOW THEM
WILL";
7190 ? "BE DASHES REPRESENTING
LETTERS. TYPE IN A WORD THAT YOU CA
N MAKE OF THAT MANY"
7200 ? "LETTERS. THE PROGRAM WILL C
HECK THE WORD YOU TYPED IN AGAINST
HUNDREDS OF WORDS THAT ARE STORED
";
7210 ? "IN THE PROGRAM. IF YO
U WANT TO CHANGE THE NUMBER OF LET
TERS, PRESS THE"
7220 ? "APPROPRIATE NUMBER KEY (3-9)
."
7240 GOSUB 7900:IF FLAG=1 THEN RETUR
N
7250 ? "IF THE WORD IS NOT LISTED, A
N UNPLEASANT NOTE WILL SOUND
, AND THE COMPUTER WILL PRINT THE"
7260 POSITION 26,3:? "WORD IN
INVERSE STYLE. IT IS POSSIBLE THAT
YOU WILL FIND A GOOD WORD THAT"
7270 POSITION 33,5:? "WE DID NOT. I
F THAT HAPPENS, IT IS OUR MISTA
KE, NOT YOURS."
7280 GOSUB 7900

```

```

7290 RETURN
7900 FLAG=0:POSITION 20,23:? "SPACE
OR START";
7910 KEY=PEEK(764):IF PEEK(53279)=6
THEN FLAG=1:RETURN
7920 IF KEY=255 THEN 7910
7930 POKE 764,255:? CHR$(125):RETURN
9000 FOR J=1 TO 100:NEXT J:RETURN

```

BBS DATABASE CON'T

```

10060 return
11000 rem ** display by area code **
11010 print:input "Which area code";
c$
11020 for i=1 to records
11030 if mid$(numb$(i),2,3)=c$ then
gosub 8000
11040 next i
11050 return
12000 rem ** display by prefix **
12010 print:input "Which prefix";c$
12020 for i=1 to records
12030 if mid$(numb$(i),7,3)=c$ then
gosub 8000
12040 next i
12050 return
13000 rem ** display by computer sys
tem **
13010 print:input "Which computer";c
$
13020 for i=1 to records
13030 if comp$(i)=c$ then gosub 8000
13040 next i
13050 return
14000 rem ** display by baud rate **
14010 print:input "What baud rate";c
$
14020 for i=1 to records
14030 if baud$(i)=c$ then gosub 8000
14040 next i
14050 return

```


SONAR SEARCH CON'T

```

1010 POSITION POX+4,POY+7: ? #6;"sona
r search"
1020 FOR X=0 TO 9:POSITION 15,X+1: ?
#6;X:POSITION X+5,0: ? #6;X:POSITION
X+5,11: ? #6;X:POSITION 4,X+1: ? #6;X:
NEXT X
1030 FOR X=0 TO 9:FOR Y=0 TO 9:POSIT
ION X+5,Y+1: ? #6;"NEXT Y:NEXT X
1040 X=INT(RND(0)*10):Y=INT(RND(0)*1
0):DEPC=INT(RND(0)*5+2):X1=9:Y1=5
1050 GOSUB 110:FOR T=1 TO 3:GOSUB 90
: ? #6;" target sounded:SOUND 0,T+
60,10,0:GOSUB 30
1055 GOSUB 90: ? #6;"
":SOUND 0,T+90,10,10:GOSUB 30:NEXT
T:SOUND 0,0,0,0
1060 GOSUB 80: ? #6;" depth charges
":DEPC=GOSUB 100: ? #6;" hits:HIT
5;" misses:MISS
1070 DEPC=DEPC-1:IF DEPC=-1 THEN 200
0
1080 S=STICK(0)
1085 X1=X1+(S-7)-(S=11):IF X1<5 THEN
X1=14
1086 IF X1>14 THEN X1=5
1090 Y1=Y1+(S-13)-(S=14):IF Y1<1 THE
N Y1=10
1091 IF Y1>10 THEN Y1=1
1095 X2=X1:Y2=Y1:LOCATE X2,Y2,Z1:POS
ITION X1,Y1: ? #6;"X"
1097 IF STRIG(0)=1 THEN POSITION X2,
Y2: ? #6;CHR$(Z1):GOSUB 60:GOTO 1080
1099 FOR P=100 TO 200:SOUND 0,P,10,1
0:NEXT P:SOUND 0,0,0,0:GOTO 1100
1100 IF X1=X+5 AND Y1=Y+1 THEN 3000
1105 SPOS=INT(ABS(X1-(X+5))+ABS(Y1-(
Y+1))):IF SPOS>9 THEN SPOS=9
1110 POSITION X1,Y1: ? #6;SPOS:GOTO 1
060
1999 REM SHIP TORPEDOED
2000 GOSUB 110:GOSUB 70: ? #6;"...tor
pedoed.....Torpedoed":
GOSUB 120
2010 SINK=RND(0):MISS=MISS+1:IF SINK
>0.6 THEN 2500:SUNK=SUNK+1:IF SUNK=5
: ? : ? : ? " RESCUED FROM MATERY
GRAVE!"
6510 GOSUB 40:GOTO 6010
6999 REM TITLE AND INSTRUCTIONS
7000 POKE 752,1:POKE 710,0: ? CHR$(12
5)
7010 OPEN #1,4,0,"K:":DIM A$(300)
7020 DL=PEEK(560)+PEEK(561)*256+13
7030 IF PEEK(DL)=65 THEN 7060
7040 IF PEEK(DL)=2 THEN POKE DL,130
7050 DL=DL+1:GOTO 7030
7060 RESTORE
7070 DATA 72,206,37,6,173,37,6,141,1
0,212,141,24,208,104,64
7080 FOR S=0 TO 14:READ T:POKE 1555+
5,T:NEXT S:POKE 512,19:POKE 513,6

```

```

7090 DATA 169,111,141,37,6,76,98,228
,104,162,6,160,0,169,7,32,92,228,96
7100 FOR S=0 TO 10:READ T:POKE 1536+
5,T:NEXT S
7110 X=USR(1544):POKE 54286,192
7120 POKE 709,0:POKE 710,124:POSITIO
N 9,1: ? "S O N A R S E A R C H"
7130 SOUND 0,0,0,0:POKE 53768,4:POKE
53761,168:POKE 53765,168:POKE 53760
,254:POKE 53764,127
7140 FOR P=9 TO 31:POSITION P,2: ? "
":NEXT P:FOR P=0 TO 39:POSITION P,0:
? " ":NEXT P:POSITION 25,7: ? " "
7141 REM FIRST ? IS CTRL'M',THIRD ?
IS CTRL'UYUN'
7150 POSITION 24,8: ? " ":FOR P1
=1 TO 7:P=INT(RND(0)*38+1):Q=INT(RND
(0)*9+10):POSITION P,Q: ? " ":NEXT P1
7151 REM FIRST ? IS INVERSE CTRL'J13
SPACESIM', SECOND IS CTRL'X'
7160 POSITION 14,4: ? "by R.F. SMITH":
GOSUB 40:POSITION 14,4: ? "
"
7170 POSITION 1,6: ? "INSTRUCTIONS(Y
N)":GET #1,A:IF A=89 THEN 7200
7180 IF A<89 THEN RETURN
7199 REM INSTRUCTIONS
7200 SOUND 0,0,0,0:SOUND 2,0,0,0: ? C
HR$(125):A$=" SONAR SEARCH INST
RUCTIONS:GOSUB 200
7210 FOR X=0 TO 9:POSITION X+4,13: ?
X:POSITION 14,X+3: ? X:FOR Y=0 TO 9:P
OSITION X+4,Y+3: ? " ":NEXT Y:NEXT X
7220 POSITION 15,5: ? "<Y":POSITION 1
5,13: ? "<X"
7230 ? :A$="MOVE * USING JOYSTICK TO
SAY 3,6":GOSUB 200
7240 ? :A$="PRESS TRIGGER TO FIRE":G
OSUB 200
7250 ? :A$="NUMBER ON GRID = TARGET
DISTANCE":GOSUB 200
7260 ? :A$="NO DEPTH CHARGES!!!":GOSU
B 200: ? :A$="SHIP WILL BE TORPEDOED
AND MIGHT SINK":GOSUB 200
UNKS THEN 2500
2020 GOSUB 90: ? #6;" MINOR DAMAGE
":GOSUB 30
2025 GOSUB 100: ? #6;"TARGET POSITION
":X;"-":Y:GOSUB 40:GOTO 4000
2499 REM SHIP SINKING
2500 GOSUB 110:FOR P=100 TO 250:SOUN
D 0,P,10,0:NEXT P:SOUND 0,0,0,0:GOSU
B 80: ? #6;" SHIP SINKING"
2510 GOSUB 40:GOSUB 80: ? #6;" ABA
NDON SHIP:RESCUE=RND(0):IF RESCUE>0
.6 THEN GOSUB 40:GOTO 6500
2519 REM SHIP SUNK
2520 GOSUB 50:GRAPHICS 0:POKE 710,0:
POKE 752,1: ? : ? : ? " S
ONAR SEARCH: ? : ? : ?

```

```

2530 ? " HITS:" SUNK " ;M
ISS;" ESCAPED": ? : ? " PACK N
UMBERED":TARGETS
2540 ? : ? : ? " YOUR SCORE IS
ZERO!":GOSUB 40: ? : ? " BECAUSE Y
OUR SHIP WAS LOST"
2545 ? : ? : ? : ? " ANOTHER GAM
E(Y/N)"
2550 GET #1,A:IF A=89 THEN 1000
2560 IF A<89 THEN ? CHR$(125): ? : ?
"THANKS FOR PLAYING SONAR SEARCH":G
OSUB 50: ? "BETTER LUCK NEXT TIME!"
2570 GOSUB 40:GRAPHICS 0:END
2999 REM SUBMARINE DESTROYED
3000 GOSUB 110:GOSUB 120:GOSUB 120:G
OSUB 80
3010 ? #6;" S U B M A R I N E:GOSUB
90: ? #6;" D E S T R O Y E D:GOSUB
50:HITS=HITS+1:GOTO 4000
3999 REM CHECK IF END OF GAME
4000 TARGET=TARGET+1:IF TARGET=TARGET
S THEN 6000
4010 GOSUB 50:GOSUB 110:FOR T=1 TO 3
:GOSUB 90: ? #6;" CONTINUE SEARCH
":GOSUB 30:NEXT T:GOTO 1020
5999 REM GAME OVER
6000 GRAPHICS 0:POKE 710,0:POKE 752,
1: ? : ? " SONAR SEARCH: ?
: ? : ? " WELL DONE!"
6010 ? : ? " HITS:" DEST
ROYED: ? " TARGETS:" IM
PACK"
6020 SCORE=HITS:IF SCORE>HISCORE THE
N HISCORE=SCORE
6030 ? : ? : ? : ? " YOUR SC
ORE:"SCORE: ? : ? : ? " HIG
H SCORE:"HISCORE
6040 ? : ? : ? " ANOTHER GA
ME(Y/N)"
6050 GET #1,A:IF A=89 THEN 1000
6060 IF A<89 THEN ? "THANKS FOR THE
GAME":GOSUB 40:GRAPHICS 0:END
6499 REM RESCUED SCORE SAVED
6500 GRAPHICS 0:POKE 710,0:POKE 752,
1: ? : ? " SONAR SEARCH: ?
7270 POSITION 20,8: ? "PRESS ANY KEY"
:GET #1,A
7300 ? CHR$(125):A$=" SOM
AR SEARCH:GOSUB 200
7310 ? : ? :A$="...URGENT...URGENT...
URGENT...URGENT...":GOSUB 200
7320 ? : ? : ? :A$="ENEMY SUBMARINE PA
CK IN YOUR AREA":GOSUB 200
7330 ? : ? :A$="SEARCH - LOCATE - DES
TROY!!!":GOSUB 200
7340 ? : ? : ? :A$="GOOD HUNTING!":GOS
UB 200
7350 POSITION 20,17: ? "PRESS ANY KEY
":GET #1,A:IF A<255 THEN RETURN

```


DRIVER SECRETS

(Reprint June, 1986 I/O Connector, San Diego, CA)

Having just purchased a Citizen MSP-20 printer, I needed a printer driver to access all the functions of 1st-Word. Since the Citizen is supposed to emulate an Epson FX 80 it immediately occurred to me all I had to do was to activate the FX 80 NLQ codes which had been commented out of the RX 80 driver which comes with 1st-Word. I did it, ran the Install.prg, and copied the driver out to my desktop. Then I wrote a little test program, incorporating all the font style features singly, and in combination, and printed it out both in draft and NLQ modes.

The results were disappointing, to say the least. In draft mode everything worked perfectly. The same was not true in NLQ mode. Underlining worked, but bold was no different than regular NLQ, whether used alone or in combination with underline. Italics printed in draft mode, even though I had specified NLQ, and bold italics were really emphasized draft quality. Subscript and superscript were also in draft mode.

Twelve frustrating hours and 28 printer drivers later, I emerged with a printer driver which supports every feature of the Citizen and even left me with one "wild card" — the light mode — which I could define any way I wanted. In the process I think I learned something about the structure of the printer drivers. If you need to construct a driver, or the one you're using doesn't support all the features of your printer, perhaps what I've learned will help you out.

If your printer supports underline, italics and bold in NLQ mode, these tips should work. If the printer has a switch controlled NLQ mode, don't use it. Set the printer in draft mode, and use the NLQ option in the print menu contained in 1st-Word to call out NLQ. Some printers can't do italics or bold in NLQ mode, and starting out in draft and using software control of NLQ gives you the option of still using italics and bold in your printing, even if it is in the draft font. However, I knew the Citizen supported all the functions of 1st-Word in NLQ and I wanted a driver which could access them.

Although I was not able to look at the source code in the driver installation program (and wouldn't know what I was seeing if I had been able to), my endless hours of trial and error convinced me there is a bug in the program causing the driver to look in the wrong place whenever bold print is combined with some other function, such as underline or italics or both. Even though I have selected NLQ mode, the driver apparently looks at the code for bold draft print in these cases, rather than at bold NLQ print. The RX 80 driver defines draft bold as emphasized print, and the hex control codes given are 1B, 45. However, most printers don't support emphasized mode in NLQ. Rather, bold is obtained by double-striking. Since NLQ is already a double strike mode, bold really consists of four passes of the print head. So instead of 1B, 45 as the codes for draft bold, put in 1B, 47 to start it, and 1B, 48 to turn it off. The Citizen uses the hex codes 1B, 78, 1 to go into NLQ mode, so I defined NLQ bold as 1B, 78, 1, 1B, 47, and turned it off with 1B, 48, 1B, 78, 1.

The second secret seems to be turning on NLQ mode each time you define a NLQ command, and turning it back on again when you issue the command to turn off the feature. For example, the code to turn on NLQ underline is 1B, 78, 1 (turn on NLQ on the Citizen), 1B, 2D, 1 (turn on underline). To turn it off is 1B, 2D, 0, 1B, 78, 1. The last three codes reinstate NLQ for the next function. When you select bold underline, the driver goes to the bold draft command and picks up the double strike command, then picks up the NLQ command and finally the underline command. When you turn it off, it cancels double strike, cancels underline, and again sends a NLQ command so the next function chosen (or just plain typing) will be in NLQ mode. It sounds confusing and redundant, but it was the only thing which worked for me on all functions, including superscripting and subscripting. There is probably an easier way to do it, but I know this way works.

The "wild card" is NLQ light. By putting in 1B, 78, 0 to turn it on, and 1B, 78, 1 to turn it off, you will actually have a light mode which is single pass draft mode. All you are doing is cancelling NLQ mode, and then reinstating it. Or, you could make light a super dark emphasized font by 1B, 78, 0, 1B, 45, 1B, 47. This sequence turns off NLQ and puts you in emphasized double strike draft, which is super dark. To turn it off, put in 1B, 46, 1B, 48, 1B, 78, 1. This sequence cancels emphasize and double strike, and puts you back into standard NLQ. You can also make your wild card double wide, emphasized double wide, condensed, etc.

Finally, if you have a printer like the Okidata 192 which only supports underline in NLQ mode, you can still access such things as bold and italics by putting in the code to turn off NLQ mode and then putting in the proper codes for the draft mode. The printer will temporarily jump out of NLQ, execute the function, and then jump back in if you reinstate NLQ mode in the line which terminates the function.

— Philip S. Gallo, Jr.

DEGAS

(The following review is submitted by a professional commercial artist)

I'm not sure what to say about the DEGAS drawing program other than to say I've not used the NEO since getting DEGAS!

I do have some reservations about the way some of the features work. For instance????(lipses) show several breaks and jogs in the lines (circumference) which have to be laboriously corrected in the "magnify" mode. Thank heavens for that feature, it's the greatest! The "Disc", which is just a filled circle, has the same jogs in the shape.

"Frame" and "Box" (filled frame) work perfectly. I can't see a reason for the "Polygon", as the "K-line" seems to do the same thing. As for the "Slow Draw", I haven't had occasion to need it. If anything, I prefer some way to speed up the action as I find it takes me four times as long to produce a drawing on the computer as it does on the drawing board in the conventional manner. Of course, I'm prejudiced as I've spent a lifetime doing it my way.

I use "Line", "K-line" and "Rays" quite often as they are time savers in that they produce clean lines requiring no cleanup except for occasional overmode I like the "Xray Text" better than the "Block Text" as I don't care to block out the background in most visuals. "Move" is useful because it saves having to erase and redraw if the image might look better in a different position. "Airbrush", "Shadow" and "Mirror" with their "Set" modes are all good features; very handy for special effects! I use the "Set Colors" all the time as I am particular about my colors. Though I can't always make a color exactly as I want it.

I haven't tried to "Make fill, line or brush", so can't comment on them. I do want to try designing better looking letters with the "Load Font" mode sometime in the future. I don't seem to have the time just now to get into that. I expect it will require quite a bit of time. As for "Print Pic", I can't figure out how to print my artwork with my SG-10 printer, so I need help with that. "Print type" and "Set Drive" are also mysteries to me. [Editor's note: Holding down the "Alternate" key while pressing the "Help" key, and with the printer turned on, will print whatever is on the monitor screen. DEGAS seems to provide only an Epson driver, so "Print type" permits only the selection of that driver to control a printer. "Set Drive" is for those folks with more than one disk drive: You can force the program to look to Drive B: for its data.]

The "Load", "Save", "Delete" and "Erase" pic features are obvious, as is "Quit". One bothersome thing: It takes a lot of "clicking" to run through 38 fill patterns, especially when I go past the one I want and have to make another stab at finding it. It seems to me that numbering the patterns or showing several pattern windows together might make the choice simpler.

There, how's that? You can be sure I do appreciate the use of DEGAS

— Harry Franz

MEETING
WED. SEPT. 9TH
7:30PM
SOUTH EUGENE
HIGH

USER HINTS

A good project might be to compile all these "user hints" you've seen in this newsletter, and some which have appeared elsewhere, for a New Users Handbook. It doesn't take long for a new user to learn to walk around the ST/GEM system pretty well, but often the new user seems a little lost. For many people, the ST is their first computer. So they don't know how easy it is to use — compared to an IBM, or other 8-bit computers. They get their equipment out of the box and look at the scanty little manual Atari provides and don't know what to do next. They might format their 1st Word disk, for instance, thinking they're just checking the disk to see if it's good. Stuff like that. We can help. And that's what a user group should be: Primarily a resource for the new user. The old timers know what to do and where to go for help. If you come across any helpful hints on the use of the ST, send them in to us and we'll share them with all our readers.

Selective Copying: Starting the mouse on a directory, but not on any item, will create a box. Holding down the left button and moving the mouse down will expand the box to encompass as many files showing on the screen as you want. If you want to remove some items from this box, hold down the shift key and press the left button on any highlighted item. If you want to add some to the box, hold down the shift key and press the left button on any item not highlighted (it then becomes highlighted and will be treated as one of the group already highlighted). Once you have all the items highlighted you want, you can copy them to another directory by dragging them to another window or to a desktop icon (either drive or trash!).

Remember: The Esc key will clear all Selection spaces inside dialog windows on the GEM desktop. So anytime you want to change things like date and time on the Control Panel, or directory selections, etc., just press Esc and type in your new information.

Remember: The Format Disk option on your desktop will destroy all data on the disk as it cleans it out to prepare for new data which you must place onto the disk.

Here are some new hints from the Jul/Aug 1986 issue of Current Notes:

From H.B. Monroe, Wadesboro, NC

Different Drives: You cannot copy disk to disk between a single sided and double sided disks. But you can "rubber band" a list of highlighted files between the two disks, provided there's enough room on the single sided disk when going from the larger disk to the smaller.

Clock Cards: With the Logikhron Clock Card installed, pressing "Return" when prompted for date and time seems to be all you need if DESK.ACC and CLOCK.RSC files are on the program disk.

From Marylou J. White, Fremont, CA

Icon Names: Click on the icon and then drag down the Install Drive option from GEM. Press Esc to delete the old name and type in a new one. Save the Desktop onto your boot disk. For the Trash icon, load the DESKTOP.INF file into a text editor or word processor. Change the name, save the file, re-boot and save Desktop again. Mary Lou's icons: Top Drive, Bottom Drive, and File 13.

Opening Files: Instead of clicking on a file and then going to the drag down menu and clicking on Open, a double click on the file, or a click and press of "Return" will open the file.

Backing up Data Files: It's easier to save a file twice (the second time on your backup disk) then it is to try to remember to do it later by loading the disk and transferring the file.

From Dave Duberman, Mountain View, CA

Item Selector: Suppose an application program presents an Item Selector box and you want to list **all** the files on a particular drive. Click on the "Directory" line and press "Esc" to erase the line. If you want other than drive A, type the drive letter and a colon, e.g. "B:". Now click on the "Title Bar" at the top of the directory window in the Item Selector box. Your drive selection will be padded to "B:½.*" and all the files on the drive will appear as items to select from.

ST Basic: You can pass position and size parameters in the OPENW command. For instance, OPENW 2,30,40,200,100 opens the second window and puts the upper left corner at x = 30, y = 40 with a width of 200 pixels and height of 100 pixels. This is undocumented, and prone to bugs. Never open a window with the upper left corner y-position less than 10

HELP

We want to know how fast this newsletter is getting to you. So we're enclosing some form of coupon for you to return to us after marking the date of receipt. We want to know if this bulk mail business will be acceptable to us. So, while we're putting in something for you to do we want to make it even more interesting. Here's a survey to which you can respond. Your responses will be reported in a future issue of the ACE Newsletter for your interest and ours.

1. **General Information**— Your age: _____ Your sex: M F

2. **Hardware** (give us the number of items of each type named):

2.1 Computers:

400 _____; 800 _____; 1200XL _____;
600XL _____; 800XL _____; 65XE _____;
130XE _____; 520ST _____; 1040ST _____

Comments: (Tell us about any memory upgrades):

2.2 Mass Storage Devices (cassette drives, disk drives, etc.):

810 _____; 1050 _____; SF354 _____;
SF314 _____; Indus _____; Trak _____;
Rana _____; Cassette _____; Other _____

2.3 Printers:

1020 _____; 1027 _____; Epson _____;
Gemini _____; Panasonic _____;
Other (give name) _____

2.4 Other Accessories:

850 Interface _____ Other Interface _____
300 bps Modem _____ 1200+ bps Modem _____
Koala/Touch Pad _____ Voice Synthesizer _____
Music Synthesizer _____ Trak Ball _____
Joysticks _____ Paddles _____

3. Computer Usage:

3.1 Rate your skill:

Beginner _____ Intermediate _____
Advanced _____

3.2 Languages Used:

Basic _____ Action! _____ Basic XL _____
Assembler _____ C _____ Pascal _____
Forth _____ Logo _____ Pilot _____
Modula-2 _____ Other (list) _____

3.3 Area of Usage (rank in order of preference with "1" as highest):

Entertainment _____ Education _____
Business _____ Personal _____
Tinkering _____ Other _____

4. ACE Newsletter (what kind of articles do you find the most interesting, or entertaining or informative — or, what kinds of articles do you want to see more of here?). Rank in order of priority, with a "1" as high:

Entertainment _____ Educational _____
Business _____ Hardware mods _____
Hardware reviews _____ Tutorials _____
Software reviews _____ News/Rumors _____
Program listings _____ Other (describe): _____

5. Meetings. Do you want an article each month describing what went on at the last meeting?

Yes No Don't Care

5.1 Rank in order of priority ("1" is high) what you want to see at a meeting:

Demonstrations:

Hardware _____ Software _____
Q & A _____ Special Guests _____
News/Rumors _____ SIG groups _____
Software sales _____ Other _____



ST Library

If you want a library list, send 50 cents. Each disk is \$10, but if you want two of them put onto a double-sided disk, your cost is only \$15. Remember, a single-sided disk drive cannot read a double-sided disk!

This month we've added Xanth software's FUJIBONK for the ST. I put it on the Hippo Demo disk for want of room on any other disk. It's more than 120k!

The C-Disk has a lot of additions, with utilities to make programming easier in this language; I also put an archiver program, a public domain assembler, and LIBR.PRg and DELIBR.PRg here. There is also an updated file compare program.

We have a new Language Programming disk with a 68k "Tiny Basic" interpreter for your use, along with versions of Lisp and files for use with Pascal and Modula-2.

The Low-Res Demo disk, has added MICKEY.PRg which turns your mouse cursor into a little picture of Mickey Mouse; SUPERBOX.PRg; 3DDemo.TOS, a real-time 3-D demo.

The Desktop Stuff disk has the following additions: TI59.ACC & .RSC; MITES.ACC; CLI.ACC (mini-shell); SNAPSHOT.ACC (Degas screen to file dump); and the latest (1040 ST) versions of CONTROL.ACC and EMULATOR.ACC. We've also added a SETRES.PRg which toggles the display between Medium and Low resolutions.

The MIDI & Sound disk now contains an improved DLXPIANO.PRg with parameter files.

Telecommunications disk: VT100EMU.TOS, VT100.DOC, RS232SET.PRg.

Utilities disk: DBLBOOT.PRg (creates a DS boot disk); DUMP.TOS; LABELS.PRg; PRINT.PRg; SEEKTS.TOS; TPRINT.TTP & .DOC.

Games disk: MAZEMAKR.TOS; MASTMIND.BAS & .DOC; PACHINKO.BAS; STBATTLE.TOS; TARGET2.PRg

POWERVERSION

(\$24.95 from Power Systems, 43328 S.E. 176th St., North Bend, WA 98045.)

This program is used for displaying .NEO pictures. You first use a provided utility for compressing the pictures, then you create a program to determine how the pictures are displayed. You have a large number of display options, such as mering pictures, opening a picture like a curtain, a venetian blind, etc. You can tell it to pause for a specified length of time, or wait for a keystroke. You can predefine keys to go to certain pictures and display them. For any kind of presentation where you want to use pictures, this program could be invaluable. Especially useful in a business presentation of graphs — the picture merge ability allows you to merge graph lines and text onto a main graph background. Highly recommended

POWERASSIST

(\$29.95 from Power Systems - see above for address.)

This program patches out the "bomb" interrupt. Instead of getting bombs on the screen, this program will take over and display relevant information about what went wrong. It will then allow you to change memory and registers, search for a character or string data, run at a specific address, and print information about the "bomb" and the state of the registers. This can be very useful for the assembly language programmer to help find bugs. In higher level languages, it may help, but it will be harder to know where in your program you are having the "bomb"

— Ralph Walden

BOOK REVIEWS

Highest rating = ****

COMPUTE!'s ST Programmer's Guide (\$17, 356 pages, Compute! Books, Box 5038, FDR Station, New York, NY 10150, 1-800-346-6767) is a complete manual for the two languages provided with the Atari ST, ST Basic and Logo. Also there is information on how to write a GEM Application for those who have a C compiler. **Good Points** : List of ST Basic and Logo error messages and what they mean; list of GEM VDI Opcodes with an example program; shows how to access the disk drive from ST Basic; and there's an index. **Bad Points** : Not enough example programs. **Rating** ***

The Atari ST User's Guide (\$16, 216 pages, Osborne McGraw-Hill, 2600 10th Street, Berkeley, CA 94710) isn't the "indispensable guide" the cover says it is. Chapter 1 tells you how to set up your computer. Chapter 2 tells you about the desktop (how to set the time, date, and colors). The rest of the book is a duplicate of the Logo manual which comes with the computer. **Good Points**: List of Logo errors and an index. **Bad Points**: No new information. **Rating** *

Atari ST Logo (\$17, 252 pages, Hayden Book Company, Hasbrouck Heights, NJ) is a Logo tutorial for beginners. It is written in a clear, non-confusing style. There are 11 chapters: Getting Started, Defining Procedures, Editing, Drawing Curves and Circles, Creating Designs and Pictures, Using Variables, Designing a Number Guessing Game, Building a Graphics Game, Programming Real Time, Playing with Words, and Mastering an Interactive Logic Game. **Good Points**: Many example programs, new Logo commands are brought in gradually, gives projects to try and has the answers in the back of the book, and there's an index. **Rating** ****

— Scott Pope

MEGAMAX C

Used properly and with a thorough reading of the documentation, MEGAMAX is a very good and easy to use compiler. To date, any of the problems I have encountered have been of my implementation of MEGAMAX rather than the fault of the product.

MEGAMAX comes with 2 disks and a large, 3-ring notebook chock-full of documentation. Everything needed to run the compiler and various resources is answered by the documentation — but it has to be read thoroughly which will take some patience.

Initially, I was frustrated because my screen displays were screwed-up. In MEGAMAX most of the standard I/O calls are buffered by default. Once I read buffer to a NULL I was able to regain control of the screen display. Other compilers I have used use a NULL buffer by default and this difference threw me for a while.

The last ACE Newsletter ran a copy of Ralph Walden's benchmark tests which included MEGAMAX along with DRI and LATTICE. A number of conclusions about MEGAMAX are apparent from these tests. For example, MEGAMAX runs the sieve very well but runs the Intmath and Pointer programs slower than some others tested. For sheer compilation/link speed MEGAMAX is ahead of the pack.

Several months ago, I wrote a program using LATTICE which compiled on that system to a 28k program file. Porting it over to MEGAMAX, the program was only 14k in length and ran so much faster I was forced to incorporate delay loops in the source code. This may not be the case with every program, but in this instance I became a deciple of MEGAMAX.

In compiling, I feared several times the compiler had aborted when, in fact it had just done its job with lightening precision and speed. Furthermore, using batch files for all of my processing, I find MEGAMAX to be not only fast but very efficient and easy to use.

My review copy of MEGAMAX does not recognize the printer as a device which can be assigned to a file. This is really not a problem since the printer port is always open and it is relatively simple to write your own printer routines via the Cprnout function. I stewed over this for quite a while before I wised-up. Now I have the printer interfaced perfectly with MEGAMAX with a complete set of Epson printer codes and the works.

The Editor which comes with this program, while usable, is not my first choice in editors. Editors become very personal with programmers, and I find the MEGAMAX Editor to be clumsy and very abbreviated compared to what I am used to using. A product like MEGAMAX, however, can be appreciated in spite of its editor, and my "editorial" opinion is admittedly biased toward my favorite editor, which just happens to interface perfectly with MEGAMAX.

Included with MEGAMAX is a Resource Construction Program, parts of which are not yet implemented. It is, however, a lot more than I had expected, and what I have tried on it works fine and is not as complex as I had feared.

In conclusion, I have switched exclusively to MEGAMAX as my C Compiler for the ST. Perhaps if I were a developer I might want a system where in-line optimization is, if not easier then more direct, but presently this fine product meets my needs. The price may seem hefty for some budgets. Overall I think it is worth it, especially compared to the Mac versions' price.

— Graham Smith

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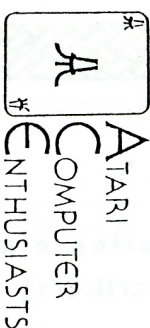
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